



Business Plan

Section K

Introduction

Each Air Force technology transfer focal point must prepare and submit a business plan to the Air Force Technology Transfer Team, AFRL/XPTT, by 1 November every calendar year. The purpose of this plan is to present future plans for technology transfer (T²) with respect to the organization's present transfer activities. The Air Force Technology Transfer Management Team aggregates these individual plans into the Air Force Technology Transfer Plan. The information contained in these plans allows for the coordination, integration, and facilitation of technology transfer activities across the Air Force. It helps to provide the information necessary to identify and allocate resources commensurate with the specific needs of the transfer focal points. A single service business plan is then submitted to the Office of the Undersecretary of Defense, Department of Defense Research and Engineering (ODDR&E) Office of Technology Transfer, by 1 December each year.

In this section of the handbook you will find the outline of the business plan. The business plan consists of six major sections. They are organization mission, overview, five-year strategic goals, one-year objectives, resources, and performance measures as described in detail below. Attachment K is the business plan outline format.

1.0 Laboratory Mission

State the organization's mission and vision. The number of units and subunits and where technology transfer most occurs. (Your local public affairs office will be able to provide this information.)

2.0 Overview

- 2.1 *Organization Description* (Use the general description already developed by your public affairs office; no need to create a new one).
- 2.2 *Year in Review*

- *Major Success Stories from Past Year (Reporting FY) (Figure K1)*
 - Total number of active CRADAs
 - Total number of new CRADAs initiated
 - Number of CRADAs with foreign partner(s)
 - Identify country(ies) of CRADA foreign partner(s)
 - Number of products developed using technologies offered for sale in commercial markets

# of Active CRADAs	# of New CRADAs Initiated

Figure K1

- *CRADAs* If any of your organization's technologies transferred under a CRADA became available for consumer (public) or commercial use during the reporting fiscal year, provide a descriptive summary of each (include a graphic).
- List the titles of Non-domestic CRADAs and the countries.
- *Intellectual Property (IP)* In *Figure K2* below, provide the number of new inventions disclosed, the number of patent applications filed, the number of patents issued, and the number of active inventions that were in force for the reporting FY.

# of New Inventions Disclosed	# of Patent Applications Filed	# of Patents Issued	Total # of Active Inventions

Figure K2

- For organizations that license such intellectual property, list the number of active licenses your organization has for "other intellectual property" in *Figure K3* on the next page.

(Other intellectual property includes non-patented inventions, authored works that would be copyrighted if the author were a non-federal employee, and information deemed “commercially valuable” by a CRADA partner and appropriately protected by the organization.)

- If licensee is a non-domestic organization, list the country and type of license.

# of Exclusive Licenses	# of Non-Exclusive Licenses	# of Partially Exclusive Licenses

Figure K3

- Figure K4 requests total income information for the reporting FY for authored works, protected CRADA information, and other IP.

Total Income for Authored Works	Total Income for Protected CRADA Information	Total Income for Other IP

Figure K4

- Report the total earned royalty income based upon use of licensed invention (generally a percentage of sales or units sold) in Figure K5.

Total Earned Royalty Income of Top 1% of Licenses	Total Earned Royalty Income of Top 5% of Licenses	Total Earned Royalty Income of Top 20% of Licenses	Total # of Licenses Terminated for Cause	Total # of Products Based on Licensed Technologies Commercially Available

Figure K5

- What was the disposition of royalty income earned in the reporting FY?
- *Key Lessons Learned*
- Discuss your transfer strengths identified

during this past year and how you will build upon those strengths. Strengths can be characterized as those activities you did extremely well within the constraints of your manpower and budget. These strengths should be identified in enough detail that other transfer focal points could adapt them to their management techniques of transfer at their laboratories or centers.

- Identify those areas you need to improve. These can be characterized by those actions which were in last year’s plan and did not run as smoothly or as well as you anticipated. Include recommended corrective actions which would cause a positive outcome the next time you take similar actions. The intent of this section is to identify areas which other transfer focal points may have solutions for or could recommend improvements.

2.3 The Year Ahead - Implications for Goals, Objectives and Strategies

- Any areas showing greater promise that suggest new or different investments or emphasis (This includes but is not limited to financial investment. Development of CRADAs, patents, partnerships that assist your lab in developing new technology areas, etc., should be highlighted here.)
- Any shifts in the planning year’s priorities that are suggested by the past year’s experiences should be summarized.
- Summarize what your organization is doing to ensure that domestic T² is a high priority (Describe staffing adjustments/increases, actions related to CRADAs, Patent License Agreements (PLAs), Educational Partnership Agreements (EPAs), donated equipment, joint ventures with small businesses, etc.)

Organizations must report the total number of items and dollar value of all property transfers. ODDR&E reports this information to the Defense Logistics Support Center (DLSC) annually.

3.0 Strategic Five-Year Goals

For the six transfer macro process steps, discuss where you want to go over the next five years and how you're going to get there. Example paragraphs follow each area title.

- *Training:* Provide the percentage of the laboratory or center S&Es you plan on providing transfer training and the number of ORTA staff you will send to the Federal Laboratory Consortium training sessions.
- *Identifying Available Technologies:* List how you plan on identifying those technologies at your laboratory or center which could be made available for transfer; also, how many technologies you plan on conducting technology assessments. This information should talk about the things you will be doing to increase the number of technologies which could be successfully transferred.
- *Marketing:* Write your strategy for advertising those newly identified technologies available for transfer. List magazines you will advertise in. The number and location of conferences or symposia you plan on taking a display or exhibit. Include those opportunities you plan on teaming with other ORTAs or the Air Force Technology Transfer Management Team.
- *Connecting with Outside Partners:* State how you plan on improving the availability of the ORTA office to outside inquiries - how you will energize the S&Es to work with you to identify and obtain new outside partners.
- *Signing the Formal Transfer Agreements:* State how you will streamline or improve the signing and review process at your laboratory or center.
- *Post transfer administration:* Tell how you will improve and increase the number of success stories published in local and national media and how you will administer any local awards programs. Include how you will improve the recognition and awareness of your program at your laboratory or center.

4.0 One-Year Objectives

Specific, short-term performance targets which are supportive of the Strategic Five-Year Goals and which make partial or complete progress towards attaining one, some or all of these goals. The development of one-year objectives should include but not necessarily be limited to areas such as the following:

4.1. *Reporting/Management Information*

- Issues concerning collection, analysis, and transmittal of information related to DDR&E, T2 transactions, program investment data to DTIC.

4.2 *Marketing Outreach*

- Marketing outreach includes participation in trade shows, symposia and conferences.

Include opportunities in which you were able to team with other ORTA staff members. Provide copies of advertisements.

4.3 *Internal Relations*

- How is T² part of S&T programs by plan, budget, and execution? (Provide examples; i.e., involved companies early on in research)

4.4 *External Relations (Intermediaries, Intergovernmental, and Commercial) (Cite specific examples as applicable)*

- Partnership Intermediaries - Identify the partnership intermediary (agent of a state or local government, or nonprofit entity owned in whole or part by, that assists, counsels, advises, evaluates, or otherwise cooperates with small business firms that need or can make productive use of technology-related assistance from a federal laboratory)
- State and local government relations - Document your organization's participation in state and local activities that promote technology transfer. What kinds of support does your organization provide the state and local community?
- Provisions of technical assistance - Formal or informal consultation. The formal consultation could be in the form of an MOU or CRADA.
- Participation in state/local activities that promote T² - Community service opportunities

in which ORTA staff participate and/or provide technology transfer documentation. This area also includes the support you provide to visits of state and local government distinguished visitors.

- Relations with the FLC and others that link T²
- Preparation of application assessments of selected R&D projects which may have potential commercial application(s)
- Other provision of information on federal R&D

5.0 Resources

List the various amounts and kinds of Air Force resources at your laboratory or center, that are dedicated to support the transfer program. The first part can be a matrix of the investment level. This information directly feeds the Air Force Technology Transfer Performance Measures (See Section L of the Handbook for more information) and includes the AF partner direct investment (what we bring to the Figure to support a specific transfer agreement), the outside partner direct investment (what they bring to the Figure to support the specific transfer agreement), and your transfer office overhead to support transfer throughout the fiscal year. The direct investment by the partners will come from the sum of all the formal transfer agreements signed during the fiscal year and reported to the Air Force Technology Transfer Management Team. The next part on overhead refers to the unreimbursed expenses of the focal point office in support of the transfer program during the past fiscal year. Total of direct investment equals the Air Force investment plus partner investment plus Air Force overhead.

5.1 Human Resources

Detail the number of government and contractor support members of your technology transfer team. If you have additional personnel from outside sources, e.g., Entrepreneurial Technology Apprenticeship Program (ETAP), and their funding sources.

5.2 Financial Management

Identify overhead costs (\$K) for the

organization's technology transfer program.

- Travel
- Government Salaries
- In-House Contract Support
- FLC
- Specific Projects (handbook)
- Miscellaneous

The revenues are broken into two types, Reimbursables (or "pass through" to recover the AF costs of completing the transfer) and Other (royalties and intellectual property license fees).

List these values in *Figure K6* by fiscal year quarter.

	Reimbursables (\$K)	Other (\$K)
1st Quarter FY00		
2nd Quarter FY00		
3rd Quarter FY00		
4th Quarter FY00		

Figure K6

In the next part of this section, include a description of how your lab or center used transfer revenues during this fiscal year (*Figure K7*). This is not intended to be a cost accounting, but a generalization by categories (of your choice) of how the funds were expended. You may use a matrix and show the dollar figures and the relative percentages spent in each category. Some of the categories may include: awards, travel, transfer "seed" money, marketing, miscellaneous, and sent to treasury (not spent). Because there is a time limitation on expenditures, the total spent may not necessarily equal the amount of revenues received during the past fiscal year. See your local FM representative for the actual determination of your revenue expenditure time limitations.

FY00	Air Force Investment (\$K)	Partner Investment (\$K)	Air Force Overhead (\$K)	Total (\$K)

Figure K7

Analyze your manpower used in the direct support of transfer and the projections of manpower

requirements over the next five years. Discuss what you have on-hand relative to your plan by functional type (position titles) and what you need (tied to where you want to go as described in the strategy & tactical plans section).

The last part of this section is an analysis of your focal point office budget. Compare the past fiscal year expenditures (overhead) relative to your near term strategy & tactical plans. Discuss the impact these funding levels will have upon your five year plan. Discuss your plans to manage either a shortfall or excess funds level.

CORE METRICS

The Technology Transfer Integrated Planning Team (TTIPT) developed a common set of local metrics for each transfer focal point to use in their local management of the transfer process. See Section E of the Handbook for a detailed description of these local metrics. These local metrics are identified as “Core” or “Tool” metrics. “Core” metrics are used by every transfer focal point and “Tool” metrics are used at the discretion of the transfer focal point.

Example of Local Metrics:

Core Metric #1: Percent of Local People Trained

Core Metric #2: Market Resources and Technologies

6.0 Performance Measures

Present your local metrics. Use graphical depictions of the core metrics. These graphs should demonstrate the relationship between your strategy and your actual experience. Also use the tool metrics (as described in Handbook Section I) as you deem necessary to demonstrate your year in review. Tool metrics are not necessary, but may add additional information to describe the improvements at your laboratory or center.

- Number of:
- CRADAs - Begin this section with a matrix of the number of agreements (regardless of type, CRADA, MOU, etc.) signed this year, the number of agreements completed this year. The number of signed agreements should equate to the number of agreements sent to the Air Force

Technology Transfer Management Team for their tracking database.

- Patents
- PLAs
- Educational Partnership Agreements
- Quality Indicators (i.e; T² contributions to or support of lab/mission)
- Any other significant T² measures relevant to your organization

The previous two parts of this section will provide the baseline for the Air Force’s success stories and provide material for future published success brochures.

Use existing data collected for the organization quality performance indicator as a formal measure transfer measurement. Use a “business performance indicator” to capture the value of what was received from the outside partner as shown in *Figure K8* below.

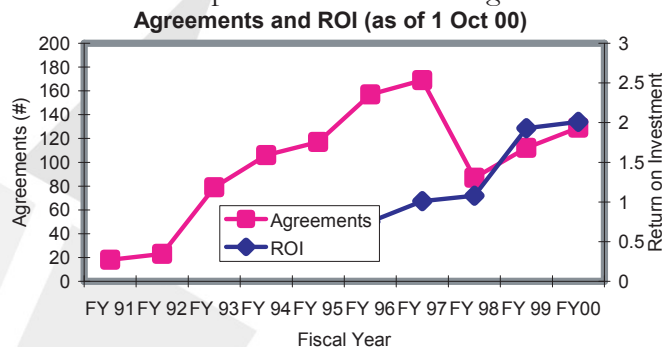


Figure K8

The left Y-axis represents the number of transfer agreements signed in each year and is measured by the curve with small squares (upper curve). The right Y-axis represents the amount of return on investment as the ratio of both the Air Force and outside partner and is measured by the curve with the small diamonds (lower curve). Return value paid by the outside partner includes royalties, reimbursements, and receipt of in-kind contributions. The amount of cash and in-kind services provided to the Air Force is an indicator of the value of the Air Force technologies transferred to the outside partner. The greater the value of the Air Force technology, the greater the partner is willing to provide the Air Force to receive those technologies. The value of the Air Force investment includes transfer overhead plus the cost of supporting each transfer agreement.

Business Plan Outline

1.0 Laboratory Mission

2.0 Overview

2.1 Laboratory Description (Use the general description already developed by your public affairs office; no need to create a new one).

2.2 Year in Review

- **Major Success Stories from Past Year**

- **CRADAs** (critical CRADAs, i.e., describe one or two that increased your lab's ability to perform its mission in a technical area; describe successes that resulted, e.g., new products; scientific breakthroughs; dollars leveraged; other progress, etc.)
- **Patents** (number; number of PLAs; examples of licensed patents; total royalty income, rather than individual statistics)

- **Key Lessons Learned**

2.3 The Year Ahead — Implications for Goals, Objectives and Strategies

- Any areas showing greater promise that suggest new or different investments or emphasis (This includes but is not limited to financial investment. Development of CRADAs, patents, partnerships that assist your lab in developing new technology areas, etc., should be highlighted here).
- Any shifts in the planning year's priorities that are suggested by the past year's experiences should be summarized below. (Does not apply in FY 99).
- Summarize what the Lab is doing to ensure that domestic T2 is a high priority (Describe staffing adjustments/increases, actions related to CRADAs, PLAs, Partnership Agreements, Donated Equipment, Joint Ventures with Small Business, etc.)

3.0 Strategic Five-Year Goals

General, long-term direction and emphasis areas. Taken together, the goals should define how the domestic T2 programs of this lab, e.g., spin-off, dual use, and spin-on activities, will contribute to scientific and technical capabilities to enhance the effectiveness of DoD forces and systems and/or commercialize technologies at your lab.

4.0 One-Year Objectives

Specific, short-term performance targets which are supportive of the Strategic Five-Year Goals and which make partial or complete progress towards attaining one, some or all of these goals.

The development of one-year objectives should include but not necessarily be limited to areas such as the following:

4.1 Reporting/Management Information

- Issues concerning collection, analysis, and transmittal of information related to DDR&E, T2 transactions, program investment data to DTIC

4.2 Marketing and Outreach

4.3 Internal Relations

- How is T2 part of S&T programs by plan, budget, and execution?
(Provide examples; i.e., involved companies early on in research)

4.4 External Relations (Intermediaries, Intergovernmental, and Commercial) (Cite specific examples as applicable)

- Partnership Intermediaries
- State and Local Government Relations
 - » Provision of Technical Assistance
 - » Participation in State/Local activities that promote T2
- Relations with FLC and others that link T2
- Preparation of application assessments of selected R&D projects which may have potential commercial application(s)
- Other provision of information on federal R&D

5.0 Resources — Operational objectives and strategies grouped as follows:

5.1 Human Resources, with a focus on how T2 will be emphasized as a critical factor in promotions, appraisals, duty, and responsibility through the following:

- T2 Education and Training

- Position Description Statements for, e.g., executives, managers, lab directors, ORTAs involved in lab/agency/DOD field activity management development programs
- Promotion Objectives
- Incentives and Awards, i.e., cash and recognition

5.2 Financial Management (This report may include the following sub-bullets; at minimum, it must include the information on Patent Expenses and Other T2 expenses as applicable)

- Salaries
- Patent/Other Income
- Distribution of Royalty Income
- CRADA Income
- Test Services Agreements (TSA) Income
- Patent Expenses [Application Fees, Maintenance Fees (first 4 years, next 3 years, etc.)]
- Other T2 Expenses

5.3 Facilities and Equipment

- TSAs (Implementation of 10 USC 2539b; give examples)
- Equipment Donations (provide examples)

6.0 Performance Measures

- Number of:
 - CRADAs
 - Patents
 - PLAs
 - Partnering Agreements
- Quality Indicators (e.g., T2 contributions to or support of lab/mission)
- Any other significant T2 success measures relevant to your lab